

Claims

1. A method for providing at least one program to a customer of an energy provider of a commodity, the program aimed at managing demand for the commodity, the energy provider delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of:

providing a gateway node for providing communication between the energy provider and the customer site;

providing a plurality of control nodes, each of the plurality of devices having a corresponding control node;

defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program;

structuring the plurality of control nodes into a group corresponding to the subset of the plurality of devices;

allowing the customer to subscribe to the program; and,

delivering the commodity to the subset of devices.

2. A method, as set forth in claim 1, including the steps of:

defining a second program having a second subset of the plurality of devices;

and,

structuring the plurality of control nodes into a second group corresponding to the second subset of the plurality of devices.

3. A method, as set forth in claim 2, wherein at one of the control nodes may belong to both the first and second groups.

4. A method, as set forth in claim 3, wherein the at least one of the control nodes dynamically moves between the first and second groups as a function of whether the first or second program is active.

5. A method, as set forth in claim 3, wherein the one or more control nodes are in both the first and second groups if both the first and second programs are active.

6. A method, as set forth in claim 1, including a the step of providing an intermediate control node coupled to the gateway node and to the group of control nodes.

7. A method, as set forth in claim 6, wherein the intermediate control node and the group of control nodes are arranged in a tree and branch network.

8. A method, as set forth in claim 6, wherein the intermediate control node and the group of control nodes are arranged in a star network.

9. A system for providing a program to a customer of an energy provider of a commodity, the energy provider delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, the program aimed at managing demand for the commodity and having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program, comprising:

a user interface for allowing the customer to subscribe to the program;

a distribution network coupled to the subset of devices for delivering the commodity to the subset of devices;

a gateway node coupled to the energy provider and the customer site for providing communication therebetween;

a plurality of control nodes, each control node coupled to a corresponding device, the plurality of control nodes being structured into a group corresponding to the subset of the plurality of devices.

10. A system, as set forth in claim 9, wherein a second program is defined for a second subset of the plurality of devices and the control nodes are structured into a second group corresponding to the second subset of the plurality of devices.

11. A system, as set forth in claim 10, wherein at least one of the control nodes may belong to both the first and second groups.

12. A system, as set forth in claim 10, wherein the at least one of the control nodes may dynamically move between the first and second groups as a function of whether the first or second program is active.

13. A system, as set forth in claim 9, further comprising an intermediate control node coupled to the gate node and to the group of controls nodes.

14. A system, as set forth in claim 13, wherein the intermediate control node and the group of control nodes are arranged in a tree and branch network.

15. A system, as set forth in claim 13, wherein the intermediate control node and the group of control nodes are arranged in a star network.

16. A system for providing at least one program to a customer of an energy provider of a commodity, the energy provider delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, the

program aimed at managing demand for the commodity and having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program, comprising:

a user interface for allowing the customer to subscribe to the program;

a distribution network coupled to the subset of devices for delivering the commodity to the subset of devices;

a gateway node coupled to the energy provider and the customer site for providing communication therebetween;

a plurality of control nodes, each control one node coupled to a corresponding device and to the gateway node; and,

a control system coupled to the user interface, the distribution network, and the gateway node for controlling delivery of the commodity and for activating the program, the control nodes being structured into a group corresponding to the subset of the plurality of devices.

17. A system, as set forth in claim 16, wherein a second program is defined for a second subset of the plurality of devices and the control nodes are structured into a second group corresponding to the second subset of the plurality of devices.

18. A system, as set forth in claim 17, wherein at least one of the control nodes may belong to both the first and second groups.

19. A system, as set forth in claim 17, wherein the at least one of the control nodes may dynamically move between the first and second groups as a function of whether the first or second program is active.

20. A system, as set forth in claim 16, further comprising an intermediate control node coupled to the gate node and to the group of controls nodes.

21. A system, as set forth in claim 20, wherein the intermediate control node and the group of control nodes are arranged in a tree and branch network.

22. A system, as set forth in claim 20, wherein the intermediate control node and the group of control nodes are arranged in a star network.